Amendments to the Claims:

Please amend claims 1 and 8, cancel claims 2 and 9 and add claims 19 and 20 as

shown in the following listing of claims. This listing of claims will replace all prior

versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) Transmitter for simultaneously transmitting at least a first and a

second signals, the first signal being modulated according to a first modulation

constellation, the second signal being modulated according to a second modulation

constellation, wherein the transmitter is arranged to pre-code at least the first signal

through a modification of the first modulation constellation so as to prevent a correlation

between the at least first and second simultaneously transmitted signals, wherein the pre-

coding of at least the first signal comprises a rotation of the first modulation constellation

through a first angle.

2. (canceled)

3. (previously presented) Transmitter according to claim 1, wherein the pre-coding of at

least the first signal comprises a change of the order of the first modulation constellation.

4. (previously presented) Transmitter according to claim 3, wherein the pre-coding

further comprises a change of the number of simultaneously transmitted signals.

5. (previously presented) Transmitter according to claim 1, wherein the transmitter is

arranged to pre-code at least the first signal after receipt of a first signal from a receiver

of the at least first and second simultaneously transmitted signals.

6. (previously presented) Transmitter according to claim 1, wherein the transmitter is

arranged to transmit a second signal to a receiver of the at least first and second signals in

Attorney Docket No. NL 031254 Serial No. 10/576,311

2

Amendment and Response to Office Action

order to notify the receiver about the pre-coding of at least the first signal.

7. (previously presented) Transmitter according to claim 1, wherein the first and second

modulation constellations are M-ary QAM modulation constellations.

8. (currently amended) Receiver for simultaneously receiving at least a first and a second

signals from a transmitter, the first received signal being modulated according to a first

modulation constellation, the second received signal being modulated according to a

second modulation constellation, in which at least the first received signal is pre-coded

through a modification of the first modulation constellation so as to prevent a correlation

between the at least first and second simultaneously received signals, wherein the pre-

coding of at least the first signal comprises a rotation of the first modulation constellation

through a first angle.

9. (canceled)

10. (previously presented) Receiver according to claim 8, wherein the pre-coding of the

first received signal comprises a change of the order of the first modulation constellation.

11. (previously presented) Receiver according to claim 8, wherein the pre-coding further

comprises a change of the number of simultaneously received signals.

12. (previously presented) Receiver according to claim 8, wherein the receiver is

arranged to transmit a first signal to the transmitter in a response to which the transmitter

is arranged to pre-code at least the first signal.

13. (previously presented) Receiver according to claim 8, wherein the receiver is

arranged to receive a second signal from the transmitter in a response to the transmitter

pre-coding at least the first signal.

Attorney Docket No. NL 031254 Serial No. 10/576,311 3

- 14. (previously presented) Receiver according to claim 8, wherein the first and second modulation constellations are M-ary QAM modulation constellations.
- 15. (original) Transceiver comprising a transmitter according to claim 1.
- 16. (previously presented) Transceiver according to claim 15, further comprising a receiver for simultaneously receiving at least a first and a second signals from a transmitter, the first received signal being modulated according to a first modulation constellation, the second received signal being modulated according to a second modulation constellation, in which at least the first received signal is pre-coded through a modification of the first modulation constellation so as to prevent a correlation between the at least first and second simultaneously received signals.
- 17. (original) Wireless device comprising a transmitter according to claim 1.
- 18. (original) Telecommunication system comprising a transmitter according to claim 1.
- 19. (new) Transmitter according to claim 1, wherein the first transmitted signal is orthogonal to the second transmitted signal and the orthogonality between the first transmitted signal and the second transmitted signal is not provided by communication channels.
- 20. (new) Receiver according to claim 8, wherein the first received signal is orthogonal to the second received signal and the orthogonality between the first received signal and the second received signal is not provided by communication channels.